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January 29, 2013

## BY ELECTRONIC DELIVERY

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street SW Washington DC 20554

Re: Progeny LMS, LLC

Permitted Written Ex Parte Presentation

WT Docket No. 11-49

Dear Ms. Dortch:

Progeny LMS, LLC ("Progeny"), by its attorneys, herein responds to the *ex parte* notice that was submitted in this docket on January 28, 2013 regarding the Part 15 devices marketed by Inovonics Wireless Corporation ("Inovonics"). Inovonics manufactures wireless panic button alarms that use frequency hopping ("FHSS") technology to transmit alerts using channels across the entire 902-928 MHz band. Progeny undertook extensive testing of different types of FHSS Part 15 devices in its 2011 test process and the results uniformly demonstrate that FHSS devices can operate in the immediate presence of Progeny's position location transmitters without experiencing any signal loss or reduced functionality or reliability.

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<sup>&</sup>lt;sup>1</sup> See Letter from Henry Goldberg, Attorney for Inovonics, to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 11-49 (Jan. 28, 2013) ("Inovonics Letter").

<sup>&</sup>lt;sup>2</sup> *Id.* at unnumbered page 2.

<sup>&</sup>lt;sup>3</sup> See Coexistence of M-LMS Network and Part 15 Devices, Spectrum Management Consulting Inc., at 18-19, 43 and 47 (Jan. 27, 2012) ("Part 15 Field Test Report") (included as an attachment to Letter from Bruce A. Olcott, Counsel to Progeny LMS, LLC, to Marlene H. Dortch, Secretary, Federal Communications Commission, WT Docket No. 11-49 (Jan. 27, 2012) (summarizing results of testing with FHSS Part 15 devices).

Inovonics' alert devices repeatedly send transmissions of an emergency alert whenever a handheld panic alarm transmitter is activated. Using FHSS technology, the alert signal is transmitted using different channels throughout the 902-928 MHz band, ensuring that, if the transmissions on some of the channels are blocked, the alert will still be received using other channels. Likely for this reason, Inovonics claims that its technology achieves a 99.999% probability that the alert signal will be successfully transmitted.<sup>5</sup>

For this same reason, Inovonics' alert devices will not experience a disruption in signal transmissions from Progeny's M-LMS network. Even if an Inovonics device is used in a location that is immediately adjacent to a Progeny transmitter, the probability that the Inovonics device and the Progeny M-LMS beacon will transmit signals on exactly the same channel at exactly the same time is no higher than 3.2 percent.<sup>6</sup> In the unlikely event that such coinciding transmissions block the Inovonics signal on a particular channel, the Inovonics signal will be received by the Inovonics receiver on one of the numerous other Part 15 channels that do not overlap with Progeny's licensed spectrum.

In an effort to dispute this fact, Inovonics argues that it "commonly locates its receivers on roof-tops of office buildings, hospitals, and assisted living centers." Progeny has reviewed the Installation and Operation Manuals that Inovonics has posted on its website for its 900 MHz receivers and repeaters and each of them appear to indicate that Inovonics' 900 MHz devices "are intended for indoor use" and should be installed in this manner.

Regardless of whether Inovonics' panic alert receivers are placed inside or outside, however, any Inovonics receiver that is capable of operating reliably in its current configuration today will still be able to function with the same reliability in the presence of Progeny's M-LMS network. That is because, even if the Inovonics receiver can detect the signals of multiple Progeny beacons, the Inovonics receiver will still be able to operate reliably using all of its other available channels across the 902-928 MHz band, the vast majority of which do not overlap with Progeny's frequencies. Inovonics claims that it is concerned about the possibility of overload to its panic alert receivers. Progeny has conducted extensive joint and independent testing of Part

<sup>&</sup>lt;sup>4</sup> See, e.g., Inovonics, EN1223D EchoStream Double-Button Panic Alarm, Installation and Operation Manual – 05583C, March 24, 2011, available at http://www.inovonics.com/workarea/downloadasset.aspx?id=4032 (indicating that "alarm signals are transmitted multiple times" using the "frequency range to 902-928 MHz for North America").

<sup>&</sup>lt;sup>5</sup> *Inovonics Letter* at unnumbered page 2.

<sup>&</sup>lt;sup>6</sup> See Part 15 Field Test Report at 18-19 (explaining the calculation of the no more than 3.2 percent probability for FCC-compliant FHSS devices).

<sup>&</sup>lt;sup>7</sup> See Inovonics Letter at unnumbered page 2.

<sup>&</sup>lt;sup>8</sup> See, e.g., <a href="http://www.inovonics.com/workarea/downloadasset.aspx?id=3532">http://www.inovonics.com/workarea/downloadasset.aspx?id=3532</a>, Section 2.1 (Installation Notes).

15 devices in an effort to identify receiver overload conditions, and no such evidence has been detected even in extreme "break case" operating conditions.

The record in this proceeding therefore clearly demonstrates that Progeny's position location network will not inhibit or degrade the operation of Inovonics' Part 15 devices. The Commission should therefore promptly conclude that Progeny has satisfied its obligation to demonstrate that its network will not cause unacceptable levels of interference to Part 15 devices.

Thank you for your attention to this matter. Please contact the undersigned if you have any questions.

Sincerely,

Bruce A. Olcott

Counsel to Progeny LMS, LLC